



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4077 BYPASS RATIO: 6.7
 UNIQUE ID NUMBER: 2PW061 PRESSURE RATIO (π_{00}): 33.2
 COMBUSTOR:
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 343.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	5.2	26.6	65.3	9.5
AS % OF ORIGINAL LIMIT	26.5	22.5	61.4	56.3
AS % OF CAEP/2 LIMIT (NO _x)			76.7	
AS % OF CAEP/4 LIMIT (NO _x)			89.0	
AS % OF CAEP/6 LIMIT (NO _x)			99.9	
AS % OF CAEP/8 LIMIT (NO _x)			115.5	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	3.019	0.10	0.10	39.80	7.4
CLIMB OUT	85	2.2	2.452	0.10	0.10	32.50	3.0
APPROACH	30	4.0	0.816	0.20	0.40	11.30	0.6
IDLE	7	26.0	0.232	3.00	20.20	4.20	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1008	1170	7434	19299	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				3.4	21.7	56.3	7.4
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.3
TEMPERATURE (K)	288
ABS HUMIDITY (kg/kg)	0.0063

FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	20.3

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: Pratt & Whitney
 TEST LOCATION: East Hartford, CT
 TEST DATES: 26/04/1994-02/05/1994

NO_x REGULATION PARAGRAPH

x	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
	2.3.2 e) (CAEP/8)

REMARKS

1. Data from X832-4

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)